



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/574,636

04/05/2006

Volker Dirk Hildenbrand

NL 031260

5463

24737 7590 08/07/2007

PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

GUHARAY, KARABI

ART UNIT

PAPER NUMBER

2879

MAIL DATE

DELIVERY MODE

08/07/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

TH

Office Action Summary	Application No.	Applicant(s)	
	10/574,636	HILDENBRAND ET AL.	
	Examiner	Art Unit	
	Karabi Guharay	2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment, filed on 5/17/07.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2879

Response to Amendment

Amendment, filed on 5/17/07 has been considered and entered.

Claim1 has been amended.

Currently, claims 1-6 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geijtenbeek et al. (US 6,147,453), in view of Lake (US 3840767).

Regarding claim 1, Geijtenbeek et al. disclose a high-pressure discharge lamp (see Fig. 2; column 4, lines 42-46); having a discharge vessel (see Fig. 2, item 3; column 3, lines 47-49) with an ionizable filling (column 3, lines 47-50) comprising a buffer gas (column 4, lines 46-54; Hg and Xe are both buffer gases) and an

Art Unit: 2879

excess amount of a metal halide, which is substantially formed by Lil (lines 46-48 of column 4), amount of Lil in the device is from 8.9 mg to 12.41 mg (as calculated from the total amount of given iodide salt, and the given molar ratio between iodides) and having a coldest spot temperature T_{CS} during normal operation of at least 1200K (column 3, lines 11-14; the cold spot temperature is referred to as T_{kp} ; column 1, lines 65-67).

But Geijtenbeek et al. fail to disclose total 8 mg of Lil (or content of Lil is 1.76 mg/cc; calculated from the dimension of the vessel) in the discharge vessel which enabling the lamp to emit 15-20% blue light with a wavelength between 400 and 500 nm and on the order of 75% of its radiation as red light with a wavelength between 600 and 700 nm.

However, Lake teaches a high pressure metal halide lamp specially used in photochemical applications where high-energy emission in specific bands of wavelength is desired (lines 19-27 of column 1).

Lake further teaches that such lamps contain Lil in an amount ranging from 0.2-2 mg/cc (which encompasses claimed amount of Lil being 1.76 mg/cc) and teaches such amount of Lil salt provide selective spectral output of blue and red light (see lines 34-42 of column 2).

Thus it would have been obvious to optimize the total amount of Lil as 8 mg (or 1.76 mg/cc) as taught by Lake, in the device of Geijtenbeek et al. enabling specific emission of 15-20% blue light with a wavelength between 400 and

Art Unit: 2879

500nm and on the order of 75% of its radiation as red light with a wavelength between 600 and 700 nm (which is the specific characteristic of such amount of lithium iodide salt) since this will provide a lamp specific for photochemical applications as taught by Lake.

As to claim 2, Geijtenbeek et al. further disclose that the excess amount of the metal halide is substantially a mixture of Lil and Nal (column 2, lines 35-39).

As to claim 3, Geijtenbeek et al. further disclose that the ionizable filling comprises substantially equal amounts of Lil and Nal (column 2, lines 43-45; the examiner interprets that the molar ratio of Lil and Nal being relative to CeI_3 means that Lil and Nal are present in substantially equal amounts).

As to claim 4, Geijtenbeek et al. further disclose that the buffer gas comprises Hg (column 3, lines 46-54).

As to claim 5, Geijtenbeek et al. further disclose that the buffer gas also comprises Xe (column 3, lines 46-54).

As to claim 6, Geijtenbeek et al. further disclose that the discharge vessel is made of ceramic (see Fig. 2, item 3; column 3, lines 47-49).

Response to Arguments

Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2879

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karabi Guharay whose telephone number is 571-272-2452. The examiner can normally be reached on Monday-Friday 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

K. Guharay
Karabi Guharay
Primary Examiner
Art Unit 2879

8/2/07